

PUREM

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Presented by
Thomas Wilhelm
General Manager
Sales & Marketing,
PUREM North America, LLC



The PUREM SCR System with AdBlue™

➤ PUREM is **systems integrator and Tier 1 supplier** of these systems to DCX Mercedes Benz. PUREM delivers product in volume production since 2005 for the Euro IV/V BlueTec trucks (Actros, Atego tec) in 38 different SCR housing configurations.

➤ Functional principle:

Aqueous solution urea AdBlue™ is being transported from the **urea tank** via the **supply unit** through **heated lines** to the **Modular Dosing Unit MDU**. Here it is mixed with air, then **injected** into then hot exhaust (>200 deg C), thus creating Ammonia. The reduction of harmful NO_x to harmless NO₂ and H₂O is taking place on the surface of the **SCR catalyst**. The entire system is controlled with a frame module, which communicates via CAN bus with the engine ECU.

Efficiency can exceed of 70% NO_x reduction, dependent on the mapping point of the engine. The SCR system allows for optimum fuel consumption calibration of the engine.

➤ PUREM is further developing systems for EPA 2010 and Euro 6 standards (further reduction in NO_x to 0.1 g/bhp-hr). These systems are called **Particle NOX Cleaner PNC™**.

➤ The PUREM **airless urea dosing system ADS™** is featuring a small sized urea dosing pump, allowing for precise injection of the NO_x reduction agent controlled by a specific after treatment control unit **ACU**.

